

EC type-examination certificate UK/0126/0157 Revision 1

Issued by:

The National Measurement Office
Notified Body Number 0126

In accordance with the requirements of the Measuring Instruments (Non-Prescribed Instruments) Regulations 2006 (SI 2006/1257) and the Measuring Instruments (Non-Prescribed Instruments) Regulations 2006 which implement, in the United Kingdom, Council Directive 2004/22/EC, this EC type-examination certificate has been issued to:

Società Cooperativa Bilanciali a.r.l.
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41011 Campogalliano
Modena
Italy

In respect of a family of automatic checkweighing instruments designated the Selecta and having the following characteristics:

Maximum capacity, Max	$\leq 1200 \text{ g}$	$\leq 3000 \text{ g}$
Minimum capacity, Min	$\geq 50 \text{ g}$	$\geq 50 \text{ g}$
Scale interval, e =	$\geq 0.2 \text{ g}$	$\geq 0.5 \text{ g}$
Number of scale intervals	$n \leq 6000$	
Maximum belt speed	$\leq 80 \text{ m/min}$	
Accuracy class	XIII(1)	

The necessary data (principal characteristics, alterations, securing, functioning etc) for identification purposes and conditions (when applicable) are set out in the descriptive annex to this certificate.

This revision replaces previous versions of the certificate.

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Valid Until: 09 March 2024
Reference No: TS0101/0022


Signatory: G Stones
for Chief Executive

Descriptive Annex

1 INTRODUCTION

The instruments, designated the Selecta, are designed to operate as automatic checkweighers (Category X).

The instruments comprise a cabinet, a pole-mounted display and user interface, conveyors, a weighing device and mechanical handling facilities.

The instruments are designed to weigh packs dynamically.

2 FUNCTIONAL DESCRIPTION

2.1 Mechanical

2.1.1 The instrument (Figure 1) is constructed in stainless steel. The framework is a fabricated floor standing stainless steel frame on adjustable feet. On the frame are mounted the modular conveyor sections (in-feed, weigh platform, and out-feed). The conveyors type, number, size and shape are not restricted. The out-feed conveyor can be equipped with one of a number of reject devices, including a flipper, drop flap, ram or air blast. The in-feed or out-feed conveyors may be equipped with quality control system such as metal detectors or x-rays.

2.1.2 The instrument is designed to be permanently installed and is fitted with a level indicator located on the weigh platform.

2.1.3 The control cabinet is located behind of the conveyors and houses the electrical hardware.

2.1.4 Weighing unit

The weigh platform may be fabricated with steel or aluminium support. The weighing device comprises a strain gauge load cell located below the centre of the weigh conveyor.

The load cell is as follows: Tedeia load cell type 240 C3, $E_{\max} = 10 \text{ kg}$.

2.1.5 The system uses in-feed photocells to detect the arrival and passing of any packs (out-feed photocells are optional). The "Auto Zero" mode is active when there are no packs on the platform. Packs are weighed as they pass over the weigh conveyor, which runs continuously at the speed of the in-feed and out-feed conveyors. The weight signal is continually monitored to find the optimal point at which to take the final product weight. The analogue output is then sent to the load cell module to be digitised and processed.

2.2 Electrical

2.2.1 The control cabinet, located behind the conveyors, houses the electrical hardware. A door at the back of the cabinet allows access to the hardware: A/D converter board type 404801, main board with CPU type Geode LX 800, 500 MHz or equivalent, power supplies, motor drivers and appropriate relays.

2.2.2 A pole-mounted display and user interface unit (Figure 2) is located above the cabinet, and comprises an LCD touch screen. The interface allows viewing of weighing parameters and results, as well as access to the instrument's various functions.

2.3 Devices

The instrument has the following devices:

- Automatic zero setting device active during automatic operation (at least every 4 min 50 s)
- Semi-automatic zero-setting ($\leq 4\%$ max)
- Initial zero-setting ($\leq 20\%$ max)
- Pre-set tare device (subtractive)
- Static calibration, not accessible to the user
- Dynamic calibration, accessible to the user, recorded
- Dynamic setting
- Belt speed setting, accessible to the user
- Internal memory for storage of batch data
- Device acting upon significant faults
- Screen check at power-up
- High resolution mode (0.1e) for testing purposes, not accessible to the user:

3 TECHNICAL DATA

3.1 The family of instruments has the following technical characteristics.

Maximum capacity (Max):	$\leq 1200\text{ g}$	$\leq 3000\text{ g}$
Minimum capacity (Min):	$\geq 50\text{ g}$	$\geq 50\text{ g}$
Scale interval (e =):	$\geq 0.2\text{ g}$	$\geq 0.5\text{ g}$
Maximum number of scale intervals (n):	$n \leq 6000$	
Tare (T):	50 to 80 g: $T \leq 35\%$ Gross 80 to 100 g: $T \leq 55\%$ Gross 100 to 1200 g: $T \leq 70\%$ Gross	50 to 80 g: $T \leq 35\%$ Gross 80 to 100 g: $T \leq 55\%$ Gross 100 to 3000 g: $T \leq 70\%$ Gross
Dynamic setting	50 g to 300 g = $\pm 20\%$ preset weight 300 g to 500 g = $\pm 10\%$ preset weight 500 g to 1200 g = $\pm 20\%$ preset weight 1200 g to 3000g = $\pm 240\text{g}$ preset weight	
Belt speed:	$\leq 80\text{ m/min}$	
Climatic environment	$5\text{ }^{\circ}\text{C}$ to $+40\text{ }^{\circ}\text{C}$	
	Non-condensing (closed)	
Electromagnetic environments	E1 and E2	
Power supply	220-240 Va.c. 50 Hz	
Accuracy class	XIII(1)	

3.2 Documentation and drawings

Description	Drawing / Document number	Rev.
User Manual	81320469.pdf	1.0
Selecta dimensional drawings	07000647.pdf	0
Selecta assembly drawings	Selecta assembly drawings.xlsx	
Selecta block diagram	Technical documentation.docx	1
A/D converter schematics	404801M.pdf 404801A.pdf	0 1.0
Main board / CPU schematics	PCM-9375_User_Manual_ed2.pdf	

Power supply schematics	52050023_a01.pdf 52050035_a01.pdf 52050036_a01.pdf	
Sealing	Sealing plan.docx	1

3.3 Software

3.3.1 Software identification

The software is held on the CF card and comprises legally-relevant and non legally-relevant parts.

The software identification shall be as follows:

The A/D Converter software is designated “SCALE: 491064 x.x”, with x.x the release number that may change following minor modifications. The A/D converter software is fully legally relevant.

The main board software comprises two parts. The legally relevant part is designated “LEGAL.OUT 4.x.x”, with x.x the release number that may change following minor modifications. The non-legally relevant part can be freely modified (currently designed VER.SW 6.1.0).

The software identification can be accessed by pressing the bottom right icon, then “Ver.SW” (Figure 3).

3.3.2 Security

The legally relevant part of the software can only be accessed by breaking the hardware seal preventing access to the CF card. Access via the user interface is prevented.

The non legally-relevant software can be accessed via the user interface or communication ports, and can be freely modified.

4 PERIPHERAL DEVICES AND INTERFACES

4.1 Interfaces

The instrument may have the any of following interface types:

- Ethernet
- RS232
- RS422
- I/O board

4.2 Peripheral devices

The instrument may be connected to any peripheral device that has been issued with an Evaluatino of Parts certificate by a Notified Body responsible for Annex B (MI-006) under Directive 2004/22/EC in any Member State and bears the CE marking of conformity to the relevant directives; or

A peripheral device without a test certificate may be connected under the following conditions:

- it bears the CE marking for conformity to the EMC Directive;
- it is not capable of transmitting any data or instruction into the weighing instrument, other than to release a printout, checking for correct data transmission or validation;
- it prints weighing results and other data as received from the weighing instrument without any modification or further processing; and
- it complies with the applicable requirements of Paragraph 8.1 of Annex I.

5 APPROVAL CONDITIONS

The following legends are durably and legibly marked on a rating plate located on the instrument (Figure 4):

'CE' marking
 Supplementary metrology marking
 Notified Body identification number
 Accuracy class
 Serial number
 Manufacturers mark or name
 Certificate number
 Model designation
 Max
 Min
 e =
 T = -
 Climatic environment *
 Electromagnetic classification *
 Maximum speed / pack rate

*: may be included in the documentation accompanying the instrument

6 LOCATION OF SEALS AND VERIFICATION MARKS

6.1 The 'CE' mark shall be impossible to remove without damaging it. The rating plate shall be impossible to remove without it being destroyed.

The markings and inscriptions shall fulfil the requirements of Paragraph 9 of Annex I of the Directive 2004/22/EC.

6.2 Components that may not be dismantled or adjusted by the user (load cell, A/D board, CF card) must be secured. The seals shall bear a securing mark which may be either:

- a mark of the manufacturer and/or manufacturer's representative, or
- an official mark of a verification officer.

Access to the load cell connection, A/D board and CF card is prevented by the sealing measure described in Figure 5.

7 ALTERNATIVES

There are currently no authorised alternatives.

8 ILLUSTRATIONS

Figure 1	Selecta typical configuration
Figure 2	Display and user interface
Figure 3	Software identification
Figure 4	Rating plate example
Figure 5	Sealing method

9 CERTIFICATE HISTORY

ISSUE NO.	DATE	DESCRIPTION
UK/0126/0157	10 March 2014	Type examination certificate first issued.
UK/0126/0157 rev 1	12 May 2014	Front page and table 3.1 corrected: $\leq$ replaced by $\geq$ for the scale interval ($e =$).

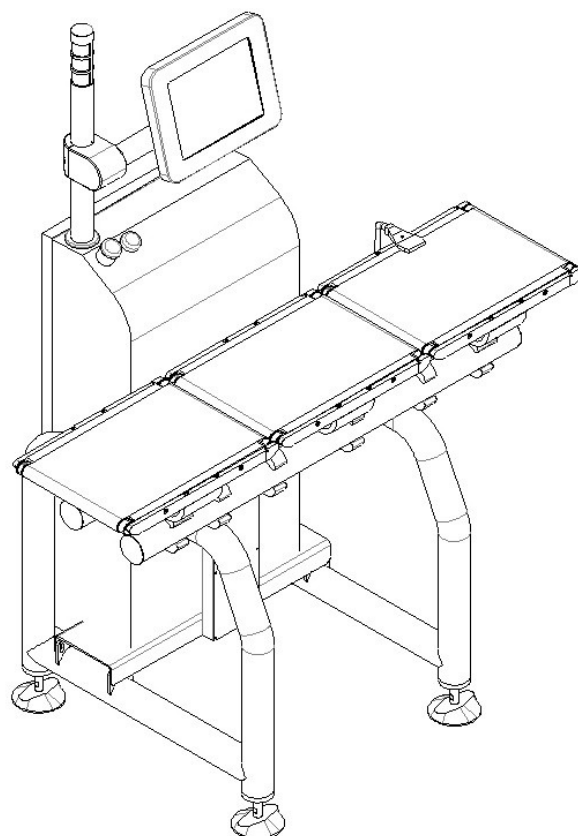


Figure 1 Selecta typical configuration



Figure 2 Display and user interface



Figure 3 Software identification

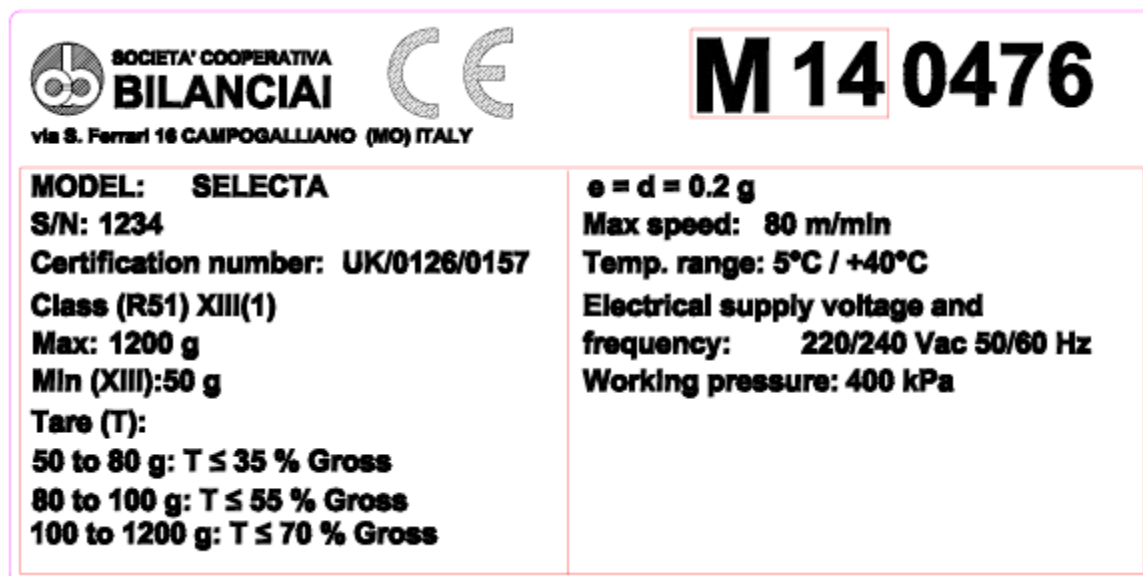


Figure 4 Rating plate example

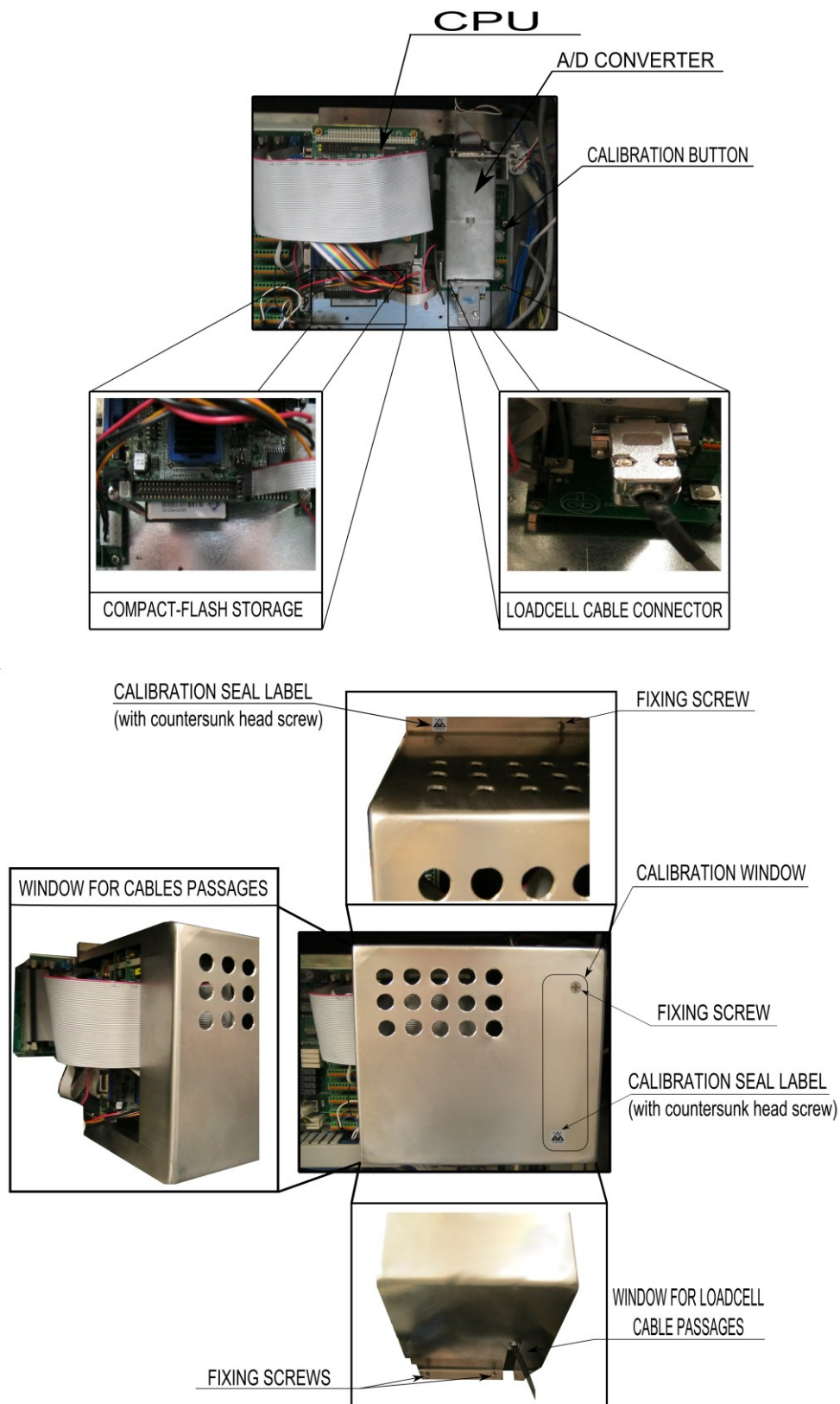


Figure 5 Sealing method